

Des Plaines, IL 60018

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF United States Patent and Trademark Address: COMMISSIONER FOR PATEN P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONTIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR GTI-1543 10/650,422 08/28/2003 Albert J. Heber EXAMINER 7590 07/21/2004 Mark E. Fejer YEUNG, JAMES C Gas Technology Institute ART UNIT PAPER NUMBER 1700 South Mount Prospect Road

3749 DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/650,422	HEBER ET AL.
	Examiner	Art Unit
	James C Yeung	3749
The MAILING DATE of this communication appears on the cover sheet with the correspondence address-Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 28 Au	<u>ugust 2003</u> .	
2a) This action is FINAL . 2b) This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) ☐ Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,8-12,14,15 and 19-24 is/are reject 7) ☐ Claim(s) 3-7,13,16-18 and 25-32 is/are objecte 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration. ed. ed to.	
9) The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)	_	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>08282003</u>. 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

Application/Control Number: 10/650,422

Art Unit: 3749

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: 47. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no proper antecedent basis for each of "said first side", "said second side", and "said air supply plenum" in lines 3 and 5.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-2, 8-10, 19, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith. The structure as claimed is fully anticipated by Smith. In particular, Smith shows in Figs. 1-4 a conveyor oven comprising:

a blower box (55);

at least one heating section wall (30) defining a heating space in fluid communication with the blower box (55), the heating space having a back side (100) proximate the blower box (55) and an opposite facing front side (26f) disposed distal from the blower box (55);

a plurality of spaced apart pair of spaced apart first and second heated air distribution plenums (90a,90b) disposed in the heating space having a heated air inlet opening (105) in fluid communication with the blower box (55) and the spaced apart pairs forming a return air conduit (81,89) therebetween extending between the back side (100) and the front side (26f) of the heating space and having an return air outlet end (75) in fluid communication with the blower box (55);

each of the first and second heated air distribution plenums (90a,90b) having a substantially planar heated distribution plate (92a,92b) facing a space between the first

Art Unit: 3749

and second heated air distribution plenums (90a,90b) and having a plurality of heated air outlet openings (94,96,97,98); and

a heating surface (15) for supporting an object to be heated disposed between the spaced apart first and second heated air distribution plenums (90a,90b).

5. Claims 1-2, 8-10, 14-15, 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Shei. The structure as claimed is fully anticipated by Shei. In particular, Shei shows in Figs. 1-6 a conveyor oven comprising:

a blower box (84);

at least one heating section wall (10) defining a heating space (11) in fluid communication with the blower box (84), the heating space having a back side (68) proximate the blower box (84) and an opposite facing front side (14) disposed distal from the blower box (84);

a plurality of spaced apart pair of spaced apart first and second heated air distribution plenums (40,42) disposed in the heating space (11) having a heated air inlet opening (54A,54B)) in fluid communication with the blower box (84) and the spaced apart pairs forming a return air conduit (60) therebetween extending between the back side (68) and the front side (14) of the heating space (11) and having an return air outlet end (not numbered in Fig. 6) in fluid communication with the blower box (64);

each of the first and second heated air distribution plenums (40,42) having a

Application/Control Number: 10/650,422 Page 5

Art Unit: 3749

substantially planar heated distribution plate (note numbered) facing a space between the first and second heated air distribution plenums (40,42) and having a plurality of heated air outlet openings (43); and

a heating surface (26) for supporting an object to be heated disposed between the spaced apart first and second heated air distribution plenums (40,42).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 11, 12, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith.

Smith discloses the invention substantially as claimed. However, Smith does not disclose that the nozzle wall is longer on a side of the heated air outlet opening distal from the blower box.

However, it is noted that the particular length selected is deemed obvious matter of design choice as admitted by applicant on page 13, lines 2-6 of the instant specification. No patentable weight can be given thereto in the absence of a showing of criticality by applicants.

Art Unit: 3749

- 8. Claims 3-7, 13, 16-18, and 25-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaminski is cited to show a burner for a conveyor oven.

Hardenburger is cited to show a conveyor oven for carrying food products.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Yeung whose telephone number is 703 308-1047. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JY July 15, 2004

James C. Yeung Primary Examiner